

6661/PCT/USSN 10/564,830
Group Art Unit 1797

REMARKS

Applicant has considered the outstanding official action. It is respectfully submitted that the claims are directed to patentable subject matter as set forth below.

The specification is objected to because of the following informality: on page 10, line 26, "ordnances" should read "ordinances." Applicant has amended the specification at page 10, line 26 by amending the term "ordnances" to "ordinances."

The specification is also objected to as failing to provide proper antecedent basis for the term "burning ... fertilizer" as recited in claim 14. Applicant has amended the specification to provide support for "burning the dead algal debris filtered out to produce chemical fertilizer" in claim 14. Support for this amendment to the specification is found in claims 1 and 6 as originally filed in the application. No new matter has been added.

Withdrawal of the objections to the specification is requested.

The outstanding rejections based on art are as follows:

- (1) Claims 7, 9 and 13 under 35 U.S.C. § 102(b)
over WO 93/21115 (Bellinger);

(2) Claims 8, 10 and 12 under 35 U.S.C. § 103(a) over Bellinger as applied above and further in view of U.S. Patent No. 3,546,111 (Busch); and

(3) Claim 14 under 35 U.S.C. § 103(a) over Bellinger as applied above and further in view of U.S. Patent No. 5,944,986 (Saho).

Claim 7 is the sole independent claim. Claim 7, as amended, claims a process for suppressing growth of green algae in an aqueous system comprising recovering carbon dioxide from industrial produced waste containing carbon dioxide, and treating water of an aqueous system with said carbon dioxide recovered from said industrial produced waste to acidify the water.

Bellinger, the primary reference in each of the rejections, teaches a method of improving the quality of a body of water by providing a pH modifying agent, preferably carbon dioxide, in the water. The method of Bellinger is stated to be particularly effective for the treatment or prevention of blue-green algal growth. However, Bellinger does not teach or suggest recovering carbon dioxide from industrial produced waste containing carbon dioxide and treating water of an aqueous system with that carbon dioxide recovered from said industrial produced waste as claimed.

6661/PCT/USSN 10/564,830
Group Art Unit 1797

Bellinger is silent as to recovering carbon dioxide from industrial produced waste containing carbon dioxide. Accordingly, Bellinger does not teach each and every element of the claimed process within the meaning of 35 U.S.C. § 102. Withdrawal of the § 102 rejection is respectfully requested.

Bellinger is also applied in combination with Busch to reject dependent claims 8, 10 and 12 under 35 U.S.C. § 103(a). Busch is relied on for teaching the additional limitations of claims 8, 10 and 12. Busch does not make up for the shortcomings of Bellinger as set forth above. Busch discloses a process for the treatment of waste water, e.g., streams, by reducing the quantity of biodegradable organic material in the waste stream. The inorganic material present is then precipitated and solid material present is coagulated and settled by adding a chemical agent to the stream. The precipitated and settled materials are then removed from the stream. The chemical settling agent is recovered and then recycled for reuse in the precipitation and coagulation step.

Busch does not teach or suggest recovering carbon dioxide from industrial produced waste containing carbon dioxide and treating water of an aqueous system with said carbon dioxide recovered from said industrial produced waste

6661/PCT/USSN 10/564,830
Group Art Unit 1797

as claimed. Neither Bellinger nor Busch provide any suggestion to modify the teachings of Bellinger or Busch in order to obtain the claimed process. Accordingly, Bellinger in combination with Busch does not render the claimed process obvious within the meaning of 35 U.S.C. § 103(a). Withdrawal of the § 103 rejection is respectfully requested.

Bellinger is also applied in combination with Saho to reject dependent claim 14 under 35 U.S.C. § 103(a). Saho is relied on for teaching the additional limitations of claim 14. Saho does not make up for the shortcomings of Bellinger as set forth above. Saho discloses a magnetic separation apparatus which coagulates substances to be removed in liquid by adding magnetic substances and a flocculent to the liquid to be treated and adsorbs and captures the thus obtained magnetic aggregates by utilizing a magnetic field of the magnetic substances which move relative to the liquid to be treated.

Saho does not teach or suggest recovering carbon dioxide from industrial produced waste containing carbon dioxide and treating water of an aqueous system with said carbon dioxide recovered from said industrial produced waste as claimed. Neither Bellinger nor Saho provide any suggestion to modify the teachings of Bellinger or Saho in order to provide the claimed process. Accordingly,

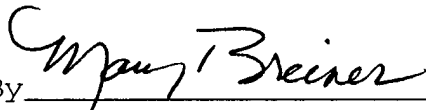
6661/PCT/USSN 10/564,830
Group Art Unit 1797

Bellinger in combination with Saho does not render the claimed process obvious within the meaning of 35 U.S.C. § 103(a). Withdrawal of the § 103 rejection is respectfully requested.

Reconsideration and allowance of the claims is respectfully requested.

Respectfully submitted,

KENNETH J. HSU

By 

Mary J. Breiner, Attorney
Registration No. 33,161
BREINER & BREINER, L.L.C.
P.O. Box 320160
Alexandria, Virginia 22320-0160

Telephone: (703) 684-6885